

# 1. Observer Duties and CAP Missions

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## 1.1 Observer duties

The mission observer has a key role in the CAP missions described later in this chapter, and the duties associated with that role are demanding and numerous. They may include planning, aircraft navigation, radio communication, crew management, weather interpretation, and scanning. It is also very desirable to have another crewmember who is familiar with the various phases of the overall operation, because that increases the overall safety and effectiveness of the mission. This manual will focus primarily on the SAR mission because that is the most common one you will fly. However, much of the information presented here applies to all CAP missions. Regardless of the type of mission flown, a proficient mission observer can reduce pilot workload and contribute substantially to a safe, efficient mission.

All air search missions are conducted under the supervision of the aircraft commander (mission pilot). Responsibilities of an observer in an assigned aircraft on CAP operational missions include:

- Maintaining a chronological flight log of all observations of note, including precise locations and sketches.
- Reporting observations upon completion of each assignment. **You are the eyes and ears of the incident commander.**
- Employing effective scanning techniques.

The following list is taken from CAPR 55-1 and expands on the responsibilities of observers assigned to a typical air search mission:

- Wear appropriate dress for the mission (e.g., gloves, sunglasses, and uniform appropriate for climate and terrain).
- Use equipment needed for the mission (e.g., binoculars, camera, clipboard, sunglasses, survival equipment, or overnight kit).
- Ensure all credentials are current and carried during the mission (i.e., CAP membership card, CAPF 101, and CAPF 76).
- Complete mission kit (e.g., gridded charts, CAPR 55-1, plotter, flight computer, and local maps).
- Complete sign-in and report to Air Operations upon arrival at the mission base.
- Obtain crew assignment.
- Report with Mission Pilot for briefing.

- Assist Mission Pilot in planning the mission. Ensure that responsibilities while in transit and while in the search area are clearly defined. The pilot and observer must agree as to when the observer will handle the radios and/or operate navigational aids (especially the GPS).
- Divide and assign scanning responsibilities.
- Coordinate with the scanner to maintain an accurate flight log of all observations on your sortie. Record all sightings to include the time and geographical location. Include such things as other aircraft, ground parties, descriptive information concerning your search area, weather conditions such as sun position and cloud cover, old wreckage or items that can be mistaken for wreckage, and all possible sightings.
- Conduct the mission as briefed and planned.
- Advise mission base of any problems or delays using procedures obtained in briefing. Return to mission base on time.
- Report with the Mission Pilot for debriefing immediately upon return to mission base. Applicable portions on the reverse of CAPF 104 should be completed when reporting for debriefing.
- Report availability for additional assignments.
- Upon completion of the day's mission assignments, return borrowed or assigned equipment.

Once team members have been briefed on the mission and accomplished the necessary planning, observers determine that all necessary equipment is aboard the airplane. Checklists help ensure that all essential equipment is included, and vary according to geographic location, climate, and terrain of the search area. Items on the observer's checklist should include CAP membership and specialty qualification cards, current charts and/or maps of the search area, flashlights, notebook and pencils, binoculars, strobe light, mirrors, flares, compass, and survival kit. Prohibited items, such as firearms, should also be listed to ensure none are included. Imaging equipment (e.g., camera or camcorder) may be included to assist in communicating the location and condition of the search objective or survivors. Unnecessary items or personal belongings should be left behind. The mission observer also assists the pilot in ensuring that all equipment aboard the search aircraft is properly stowed. An unsecured item can injure the crew or damage the aircraft in turbulence. The observer must also ensure that the aircraft's windshield and windows are clean.

Checklists should address anticipated personal needs of the observer and scanners, including instructions to dress appropriately for the climatic conditions explained in the briefing. For instance, one search team preparing for a mission in the Alaskan wilderness and other preparing for a mission in the Florida Everglades would carry very different survival equipment and personal clothing. The mission observer helps ensure the survivability of the crew by anticipating requirements in the unlikely event crewmembers are confronted with an unexpected survival situation.

Mission observers are vital to search and rescue operations. While their primary responsibility when in the search area is visual search (i.e., scanning), they perform other important duties as well. While transiting to and from the search area, observers assist the pilot by handling communications and providing navigational assistance. While in the search area, the observer periodically verifies aircraft position and may assist the pilot in operating or interpreting navigational aids (navaids).

Handling radio communications and providing navigational assistance while in transit allows the pilot to devote more time to flying the aircraft and preparing for the search. This preparation enhances the pilot's ability to fly the search pattern safely and precisely. Maintaining situational awareness (i.e., location of the aircraft) also reduces pilot workload.

Another observer duty is to supervise the scanner(s) to ensure scanning efforts are coordinated and effective. The observer divides and assigns scanning responsibilities during the mission briefing, and ensures that the scanner(s) performs their assigned duty. Monitoring the duration of scanning activity and ensuring adequate crew rest helps combat fatigue and maximizes effective search coverage.

The observer should be acutely aware of the fact that fatigue reduces search effectiveness. Fatigue can be reduced by changing scanning positions at intervals of 30 minutes to one hour (if the size of the aircraft permits), periodically rotating scanners from one side of the aircraft to the other, permitting scheduled on/off periods (if enough scanners are aboard and flying time permits), permitting a reasonable amount of communication between crewmembers, and, at night, keeping lights inside the aircraft dim to reduce reflections and contrast.

Coordination helps ensure that you do not miss something outside the aircraft while you are busy inside the aircraft. For example, you're in the search area and you need to verify a location on the sectional map. You must ensure that the crew knows that you will cease scanning for the time it takes to verify position. If there is only one scanner aboard, you should direct the scanner to look out the right side of the aircraft and ask the pilot to cover the left side as best she can (if possible, wait until the pilot workload is lowest to do this).

Managing communications activities aboard the search aircraft is another vital mission role. The observer must be aware that excessive talking between crewmembers or with ground personnel can easily evolve into a gabfest. This not only degrades mission effectiveness, it can cause the pilot to miss a vital transmission from air traffic control. The observer's self-discipline helps set the tone for the cockpit work environment.

By assuming these additional responsibilities the observer makes it possible for the crew to perform their duties with a greater degree of safety and effectiveness.

## **1.2 Observer Log**

The observer must become proficient in keeping an in-flight navigational log. The log should be maintained from take-off until landing. Since this skill requires training and experience, observers are encouraged to maintain a navigation log on every flight they take. Also, use the GPS whenever possible. Ask for sample problems using your local sectional chart; this will help you become proficient and confident.

The observer's log contains all information pertinent to the sortie, and events and sightings are recorded when they occur. It is very important to accurately determine and log the geographical location of each sighting at the time of the sighting (including latitude and longitude). During debriefing, information from this log is used to complete the CAP Form 104 (a permanent mission record). This form is passed up to air operations and the incident commander. Combined with other search data, they use this information to help determine overall search coverage and effectiveness and to make plans for future sorties.

## 1.3 CAP missions

As a review, the Civil Air Patrol (CAP) has three equally important missions—Aerospace Education, the Cadet Program, and Emergency Services. The Observer Course involves all aspects of the Emergency Services mission, including civil defense, disaster relief, search and rescue (SAR), life support, and emergency communications.

As the civilian noncombatant auxiliary of the United States Air Force (USAF) and a private nonprofit corporation, the CAP was established under Federal law by Congress (36 U.S.C. 201-208 1101). The CAP is tasked with a wartime mission, peacetime disaster relief mission, a SAR mission, counter narcotics (CN), support of the American Red Cross, and U.S. Customs support. A Memorandum of Understanding (MOU) between the USAF and CAP was instituted on 25 Jan 91 that defines the current duties and responsibilities of the CAP. CAPR 55-1 contains detailed information concerning CAP operations, and CAPR 50-15 provides specific guidance for CAP training. No supplements or operating instructions (OI) may be issued to these regulations below Wing level and only then with prior written approval by Nations Headquarters/DO.

### 1.3.1 The Wartime Mission

Information concerning the CAP wartime mission is contained in CAPR 55-1, Chapter 6. CAP OPLAN 1000 provides for CAP support to the National Command Authorities (NCA) in a declared national emergency operation—in other words, war. The CAP would supplement the military defense with a civil defense for the protection of life and property in the event of an attack on the U.S. Specifically, the CAP would:

- provide a communications network (fixed, mobile, and airborne)
- provide assessment of damage to highways and facilities
- support State and Regional Disaster Airlift (SARDA)
- provide radiological monitoring and decontamination teams

Command and control during these operations remains within the CAP chain of command at all times. Although operational control of a particular mission may rest with another agency, CAP directives apply to CAP resources.

A national emergency may also invoke the Security Control of Air Traffic and Air Navigation Aids (SCATANA) plan. The purpose of this plan is to provide security control of civil and military air traffic, navigational aids, and airspace use. It may involve the use of military interceptors, directed dispersal, landing, or grounding of aircraft, shutdown of navigational aids, or IFR-only operations.

Mission records are to be kept for 4 years and reimbursement for fuel, oil, and maintenance is IAW CAPR 173-3.

### 1.3.2 Peacetime Disaster Relief

Information concerning the CAP peacetime disaster relief mission is contained in CAPR 55-1, Chapter 5. During a peacetime disaster, CAP resources are tasked for assistance as a component of the Federal Emergency Management Agency (FEMA) Urban Search and Rescue Program, or under USAF auspices for military assistance to civil authorities. These operations could involve assistance during flood, forest fires,

toxic spills, earthquakes, storms, etc. It does not include unlawful civilian violence or enemy attack.

Command and control of CAP resources remains with the CAP. If the CAP is the lead agency, the CAP incident commander may be assigned as the overall incident commander. Most likely, however, is that overall control will rest with an outside agency and CAP will integrate its resources within the Incident Command System (while still maintaining control of CAP resources).

CAP assistance to law enforcement agencies is restricted to patrol, reconnaissance, and reporting only. CAP members may not be deputized, actively arrest or detain individuals, nor do they have any authority to restrict persons by means of force, actual or implicit. The senior CAP member on duty will ensure these restrictions are understood by both the CAP member and law enforcement agencies.

A Natural Disaster Employment Report is called a Tempest Rapid (I or III). The designated incident commander sends the report to the CAP-USAF liaison officer. Mission records are kept for 4 years. Reimbursement for fuel, oil, maintenance, and communications is IAW CAPR 173-3.

### **1.3.3 Search and Rescue (SAR)**

Information concerning the CAP search and rescue mission is contained in CAPR 55-1, Chapter 4. The USAF is the SAR coordinator for the Inland Region of the continental United States (CONUS). The Coast Guard controls the Maritime Region and the Overseas Unified Command controls the Overseas Region.

Within the CONUS, the Air Force Rescue Coordination Center (AFRCC) of the USAF carries out the National Search and Rescue Plan. As an auxiliary of the USAF, CAP provides the primary resources (4 out of 5 searches) for SAR. Chapter 4 of CAPR 55-1 sets out specific guidance for air and ground operations, including activation procedures, command and control, mission management, air and ground operations, and mission suspension or closure.

Record requirements are listed with a four-year holding period, and reimbursement is IAW CAPR 173-3.

### **1.3.4 Customs**

The CAP provides reconnaissance of the continental U.S. borders IAW a letter of agreement with the U.S. Customs Agency. Mission emphasis tends to reflect the changing political climate. Reimbursement is IAW CAPR 173-3.

### **1.3.5 Counter-narcotics operations (CN)**

Information concerning the CAP counter-narcotics mission is contained in CAPR 55-1, Chapter 7. The CAP, with the concurrence of the USAF, has established national agreements with the U.S. Customs Service's Drug Enforcement Administration and the U.S. Forest Service to participate in a program of air reconnaissance to assist in locating illicit drug traffic and growing activities. The CAP role is limited to data gathering and supporting base communications. Actual CAP emergency services missions have priority over CN operations for the use of CAP resources.

No CAP region, wing, or other unit may supplement, amend, restrict or change these agreement guidelines or procedures. CAP members may not participate in arrest, seizure, or detention operations. Command and control remains within the CAP chain of command. Mission execution is IAW CAPR 60-1 and CAPR 55-1. Missions are debriefed to the CAP CN officer. Reports are required and reimbursement for fuel, oil, maintenance and communications are IAW CAPR 173-3. Travel and per diem may also be authorized.

### **1.3.6 American Red Cross support**

Information concerning the CAP American Red Cross support mission is contained in CAPR 55-1, Chapter 9. The CAP has agreed to provide ground and air transportation, communication, and manpower to assist the Red Cross in relief operations. Specifically, the CAP may transport blood, blood products, organs, and tissue. A transport mission pilot qualification is required. Red Cross personnel may be carried on CAP aircraft for tissue retrieval with the proper prior approval. Command and control remains within the CAP. Reimbursement is from the Red Cross IAW CAPR 173-3. The mission pilot and CAP unit CC file reports.

### **1.3.7 Other partner agencies**

CAP has Memoranda of Understanding (MOUs) with other national agencies such as the U.S. Forest Service, FEMA, the Salvation Army, Department of the Interior, Federal Aviation Administration, Federal Highway Administration, NASA, National Communication Systems, National Weather Service, National Transportation Safety Board, and the U.S. Coast Guard Auxiliary. Wings may have MOUs with state agencies such as the Department/Division of Emergency Management, Department of Public Services, State Forest Service, and State Park Service.

Air Force assigned mission status may be extended to national, state, and local MOU missions. The basic USAF/CAP MOU provides that Air Force non-reimbursed assigned mission status will apply to "support missions requested by a state/local government or private agencies which are specified in memoranda of understanding or letters of agreement that have been signed and approved by appropriate Air Force authority."

Air Force mission numbers will not be issued for CAP missions in support of other federal, state, local or private agencies unless there is a MOU or letter of agreement with that agency or organization. Each MOU addresses the issues of third party liability coverage, Workmen's Compensation benefits, and expense reimbursement, and specifies if the Air Force or the supported agency/activity will provide the coverage.

All of the MOUs make it clear that support is given on an "as available" basis, and that U.S. Air Force missions have top priority.

## **1.4 Liability**

Since 1992, state and local missions no longer give Federal Employee Compensation Act (FECA) coverage to CAP members. These missions are now

designated as CAP “corporate missions” IAW CAPR 60-1 and are covered by commercial insurance. Therefore, sponsoring agencies need to extend state Worker’s Compensation and liability protection to both CAP members and the corporation whenever possible.

FECA coverage is provided for all “Air Force assigned missions” as defined in CAPR 60-1 and the USAF/CAP MOU. Generally, non-CAP members may not ride aboard CAP aircraft. Exceptions are outlined in CAPR 60-1. CAP members are covered by the Good Samaritan law and should only attempt the most basic first aid procedures unless specifically trained.

## ***1.5 Operational Agreements***

To facilitate mission execution, prearranged agreements are already in place in anticipation of most contingencies. These exist at the national, regional and state/local levels so that we do not need to “re-invent the wheel” for each new tasking. These agreements are formalized through the respective agencies’ chains of command and signed off at all levels so that everyone understands their responsibilities and the actual level of involvement for each contingency.

## ***1.6 Forms***

OPLANs, MOUs, regulations and agreements do not get the work done—people do. To ensure standardized training and mission accomplishment, a series of forms facilitate the observer’s upgrade and mission execution. These forms are the CAPF 76 (ROA), CAPF 101T, CAPF 101, CAPF 104, FAA 7233 Flight Plan, and CAPF 108.

Possession of the CAPF 76 is a prerequisite to the Observer qualification. Requirements are set forth in CAPM 100-1, Communications. An understanding of the phonetic alphabet and message transmission/reception must be demonstrated to the unit communications officer.

CAPF 101T is the Advanced Specialty Qualification Training Card, issued by the unit commanding officer. The card allows the CAP member to receive training on operational missions under direct supervision of qualified instructors. You may train in three specialties concurrently. Completion of LVL 1 is a prerequisite to issuing a 101T card. Training areas listed on the 101T card do not expire, but once qualified in a training specialty, it is deleted from the 101T and transferred to the CAPF 101, Specialty Qualification Card.

Once qualified, you may be assigned to perform duties on CAP operational missions. The currency requirement for each specialty is at least one mission (actual, training, or proficiency sortie) every two years. In addition, CAPR 60-1 requires an academic biennial review of material for pilots, scanners, and observers. If you lose your currency, recurrency is obtained IAW CAPR 50-15. Qualification transfers are allowed between CAP wings.

CAPF 104 is the Flight Plan/Briefing/Debriefing Form. The pilot or observer usually makes entries on this form. The SAR mission usually begins with a general briefing by the incident commander, followed by individual sortie briefings. The front side of the CAPF 104 is used as a checklist to ensure that all areas of the mission are briefed.

The mission log that is kept by the observer during the flight provides the information needed to complete the reverse side of the CAPF 104 during debriefing.

A CAP Flight Plan (CAPF 104 or 84) is required for all CAP missions. Usually, an FAA Flight Plan is also required; this is prepared and filed by the mission pilot and must be closed at the end of the flight, usually with an FSS. Flight Plans show details, such as the intended route of flight, ATD and ETA, fuel, aircraft type and color, and the number of souls on board, which facilitate rescue efforts in case of an emergency.

CAPF 108 is used to claim reimbursement for CAP missions IAW CAPR 173-3. Generally, fuel, oil, limited maintenance, and mission-essential communications expenses are covered by the tasking agency. Suspense for filing is NLT 30 days after mission completion. Remember – keep those receipts!

## **1.7 Summary**

You, as the observer, implement the CAP Emergency Services mission. Whether tasked during war or peace, a series of MOUs, plans, agreements, and regulations establish your authority and responsibilities, and guide your actions. CAP forms help document and manage mission accomplishment in an orderly manner. CAPR 50-15, 55-1, and 60-1 are your primary sources for written CAP operational guidance. Read your regulations and become an authority in your specialty.